

## **REMARKS**

In the Office Action dated January 7, 2008, claim 13 was rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. In response, claim 13 has been cancelled in favor of new claim 15 presented herein. Claim 15 has been prepared in accordance with the recently-enacted guidelines concerning the claiming of computerized subject matter, and is submitted to be in conformance with the requirements of 35 U.S.C. §101.

Claim 2 was objected to because of informality therein, which has been corrected. In addition to the changes discussed below, other editorial changes have been made in the dependent claims, and editorial changes also have been made in the specification. No new matter is added by any of these changes.

Claims 1-3, 10, 13 and 14 were rejected under 35 U.S.C. §102(b) as being anticipated by Doi et al. This rejection is respectfully traversed for the following reasons.

Applicants do not disagree with the Examiner's statements concerning the disclosure of the Doi et al reference, however, the ability to read the independent claims of the original application on the Doi et al disclosure arises solely due to the coincidence of the word "diaphragm" having to completely separate and distinct meanings. The term "diaphragm" is used in the present application in the sense of a mechanical diaphragm having plates that are movable relative to each other so as to create an opening allowing the passage of radiation therethrough. Radiation outside of the opening is blocked by the diaphragm, thereby resulting in the diaphragm edges being visible in the resulting image of the subject. For proper diagnostic

analysis of the image of the subject, it is desirable to be able to accurately identify these diaphragm edges in the image.

The word “diaphragm” also happens to mean the musculature that regulates breathing in animals having lungs, and this is the manner by which the word “diaphragm” is used in the Doi et al reference. Therefore, although a “diaphragm” does appear in the x-ray images discussed in the Doi et al reference, and although this “diaphragm” has diaphragm edges, the disclosure on this point in the Doi et al reference is exclusively concerned with identifying, or being able to identify, an anatomical diaphragm. The Doi et al reference has no relevancy whatsoever to identifying the edges of a mechanical diaphragm in the image, that is used to gate the radiation that produces the image before the radiation penetrates the subject.

New independent claims 15, 16 and 17 are presented herein wherein it is explicitly stated that the diaphragm is a mechanical diaphragm, and the edges in those claims are at all locations specifically identified as “edges of the mechanical diaphragm.” Moreover, the information regarding the inner structure of the diaphragm has been re-formulated to refer to the aforementioned polygon that is produced by the edges of the diaphragm in the gating of the radiation, and the distinguishing of the edges of the mechanical diaphragm from the anatomical edges in the image is stated to take place using information concerning this polygon.

Claims 4-9, 11 and 12 were stated to be allowable, and those claims already included details making clear that a mechanical diaphragm, rather than an anatomical diaphragm, is intended to be identified. Applicants presume this was the reason why those claims were not rejected based on the Doi et al reference, and therefore the Examiner already appreciates the aforementioned difference between

the subject matter disclosed in the present application and the subject matter disclosed in the Doi et al reference. Since each of the independent claims has now been revised to specifically refer to a mechanical diaphragm, Applicants submit that all claims of the application are in condition for allowance.

Early reconsideration of the application is therefore respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Submitted by,

 (Reg. 28,982)

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